

## ABSTRACT

Method and computer-readable medium are provided for controlling signaling and channel assignment in a decentralized trunked radio system to operationally mimic a centralized trunked radio system. The method allows monitoring a parameter indicative of elapsed time of channel activity, such as control channel or working channel activity or both, presently being carried in a respective one of a plurality of radio frequencies assigned to the radio system. Upon the parameter indicative of elapsed time of channel activity reaching a respective target value, the method allows determining whether there is another radio frequency in the plurality of radio frequencies assigned to the radio system available for carrying the channel activity presently being carried by the one radio frequency. If the determining action indicates the presence of an available radio frequency for carrying the channel activity, the channel activity is shifted from the one radio frequency to the available radio frequency. The method allows iteratively performing the foregoing actions for each of the plurality of radio frequencies assigned to the radio system so that radio channel activity, upon reaching the target value, is sequentially shifted to any radio frequency determined to be available, and thus ensuring that each radio frequency assigned to the radio system is generally free in a time interval commensurate with the respective target value.